S/N: 09/666,184

#### REMARKS

This amendment is responsive to the Office Action dated June 21, 2005. Claims 1 - 8 are pending in this application and have been rejected. Applicant respectfully requests reexamination in light of the foregoing amendments and following remarks and submissions.

These remarks follow the order of the outstanding Office Action beginning at page 2 thereof.

# Notice to Applicant

In the response filed on January 7, 2005 there were no amendments in the claims.

### Claim Rejections 35 USC § 112

Claims 1 - 8 have been rejected at paragraph number 3, page 2 under 35 USC § 112(first paragraph) as failing to comply with the enablement requirement. This rejection is a new rejection which has never been made during previous prosecution of this application.

The Examiner contends that the claims contain subject matter which was not described in the specification in such a way as to enable one of skill in the art to which it pertains or with which it is most nearly connected to make and use the invention. The Examiner further contends that a section describing how an

S/N: 09/666,184

average face composition is obtained through computer graphic methods by surveying average facial features cannot be found by the Examiner. The Examiner has asserted that a person of ordinary skill in the art would not know how to make such a average face based upon claim 1.

Applicant respectfully submits that this patent application, like all other patent applications, is not required to repeat and reexplain that which is old and well known in the prior art.

Initially, the Examiner should note that US Patent 6,502,583 (relied upon by the Examiner) at column 2, line 4 refers to use of image processing like morphing. This reference in '583 shows that the art of morphing as of Applicant's filing date was known to those working in the art of make up, cosmetics and the like. The publication date of '583 is September 11, 1998 (PCT publication date).

Applicant's specification at page 4, line 15 refers to computer graphic methods known as "morphing technology".

Morphing technology is also referred to at page 4, line 20.

The undersigned conducted a search in Google to determine the availability of the disclosed morphing technology during dates prior to Applicant's filing date. Attached hereto are Google attachment pages 1 - 16 which show many articles, books and programs dated prior to Applicant's filing date. This attachment shows that in dates of 1995 - 1998 there were literally thousands of articles, programs, and information sources about morphing software. For the Examiner's convenience,

the attached Google pages 1 - 16 have been additionally marked with a bracket at the right side where the references are most relevant to this application which uses morphing technology to determine average face composition of each of a plurality of races. The computer graphic methods referred to in Applicant's claims are the morphing technology discussed at page 4, lines 15 - 22.

## Patent Search

The undersigned in conducting a patent search directed to morphing found many patents which bear US issue dates after Applicant's priority date (10/01/1999) but which show publications of the applications at earlier dates. Applicant did not download this information because of the wealth of information showing US issued patent dates prior to Applicant's earliest filing date. However, the Examiner should take notice of the extensive reference to publications prior to Applicant's earliest date in patents issued afterwards.

Attached hereto are the results of Applicant's search beginning at hit 601 and continuing 729. At hit 635, US patent 5,933,527 was observed. This hit is at approximately the beginning of the patents issued in the United States prior to Applicant's priority date. All patents after hit 635 are patents issued in the United States before Applicant's priority date. A review of the titles again shows that the morphing technology art was well developed and well known prior to Applicant's filing

date.

In order for Applicant to provide simple enablement of the type shown in Figure 1 (morphing of a plurality of faces to an average face) was within the skill of those in the art. For this reason, further enablement would not have been required in Applicant's specification as of October 1, 1999.

## Discussion of Specific US Patent Disclosures

U.S. Patent 5,933,527 issued August 3, 1999 is entitled "Facial Image Processing Method and Apparatus" (attached). This patent is issued prior to Applicant's earliest filing date (priority date). This patent teaches morphing technology as would be applicable to Applicant's invention. Specifically, it relates to image processing of facial features. "morphing" is found in line 5 of the Abstract, and again in column 7, line 8 where morphing is referred to in connection coordinate data and contour points for image identification or image processing applications.

US Patent 5,495,539 (attached) issued February 27, 1996 teaches morphing technology with respect to images at column 3, line 19 and at column 10, line 19.

US Patent 5,943,045 (attached) relates to color morphing. The undersigned has marked and highlighted for the Examiner's convenience the references to color morphing within this teaching which was published as a US Patent prior to Applicant's priority date. This patent shows that the state of the morphing

technology was well developed in the art and need not be repeated in Applicant's specification in order to provide enablement.

US Patent 5,805,745 (attached) issued September 8, 1998 is entitled "Method for Locating Subject's Lips on a Facial Image". This patent relates to a morphing procedure as discussed in column 6, lines 46 - 63. This morphing procedure relates to lips and facial features as does Applicant's use of a morphing technology. The '745 patent teaches that morphing is well known in the art and discussed in references (see column 6, lines 59 - 61. Still further, the '745 patent provides a large list of publications relating to morphing and morphing technology which shows the development of the morphing technology art as early as September, 1998. Relevant portions of the '745 reference have been marked for the Examiner's convenience.

### Claim Rejections - 35 USC § 112 (second paragraph)

At page 3, beginning at line 6, the Examiner states that it is unclear whether the plurality of races at line 4 is an average face per race or an average face for all races. In response, Applicant has elected to amend claim 1, line 4 to state that it is an average face composition of each of a plurality of races. This is in agreement with the specification, and is clearly shown in Figure 1, where the different races (1, 2, 3, 4) are analyzed separately.

At page 3, beginning at line 6, the Examiner states that it is unclear how the performing enquiries are performed. Applicant

respectfully traverses this rejection on the ground that the term "performing enquiries" describes asking people or enquiring from people among a plurality of different races for the average face. This is a questionnaire of people, the results of which are then inserted into a computer for the analyzing step of claim 1. At page 3, the Examiner at line 8 asks, is the computer-based questionnaire administered to people. The answer is yes, but the questionnaire results are inserted into a computer. It is not claimed that there is a computer-based questionnaire.

At page 3, line 9, the Examiner asks "Does a computer perform analysis of resulting opinions?" The answer is yes, and this is found in claim 1, line 9 in the step of analyzing resulting opinions and submitting an analysis result as data for color maps and image maps. However, the Examiner should note that the claim does not refer to a computer as a necessary vehicle for the step of analyzing the resulting opinions. Obviously the computer is the preferred way of performing such an analysis because computers are faster. The analysis, however, could be performed without a computer at great labor and expense. The Examiner should also note that in claim 1, line 10, Applicant has changed "the" to "an" in order to provide a proper antecedent relationship for the term analysis.

At page 3, line 10, the Examiner in reference back to line 9, asks "Is this step simply asking people what they think of a particular face?" Applicant respectfully submits that the analysis step found in line 10 of claim 1 is not the same as the

previous step of preforming enquiries. This depth of performing enquiries determines what people think of a particular face. is the result of the enquiries (opinions) which are submitted for analysis in the analyzing step found at line 10 of claim 1.

Beginning in line 10 of page 3, the Examiner states, "It is unclear how 'the data' at line 14 is used within claim 1." Applicant respectfully traverses this observation. Applicant is entitled to be his own lexicographer as long as the specification adequately describes the terminology used. Applicant in claim 1, lines 11 and 12 uses the terms "color maps" and "image maps". The data for the maps is data which is a result of the analysis of opinions obtained in the performing/enquiring step and the analyzing step immediately above. Stated differently, there is an initial performing of enquiries, then analysis of the resulting opinions and then submitting an analysis result as data. Applicant's Figures 5 - 11 show the color maps and image maps referred to in this step which are obtained as a result of opinions. In claim 1, line 14, the data refers back to the initially recited data in line 11. Therefore, the data at line 14 is the data found in the color and image maps and referred to above.

At page 3, line 12, the Examiner states. "It is unclear how the color maps and image maps are generated." This rejection is respectfully traversed because claim 1 at lines 7 - 11 clearly states how the color maps and image maps are formed. It is initially by performing enquiries, then by analysis of the

resulting opinions from the enquiries, and submission of the analysis result for color maps and image maps as claimed. Therefore, the color maps and image maps are generated based upon the enquiries as described in the claim.

At page 3, beginning line 12, the Examiner asks "Are these computer generated or does a human perform this step?" As a practical matter, such an analysis should be performed by As is well known, computers are much faster than human beings in performing an analysis, however, this claim should not be limited to such a computer and its language does not recite a computer. In Applicant's specification, Applicant teaches that morphing technology is used. As explained above, in the undersigned's review of prior art available at the time of filing this application, morphing technology is in fact, based upon computers. However, the methods shown in the prior art could be performed by a manual calculation if one chose to do the computer based calculation manually.

At page 3, line 13, the Examiner states, "It is also unclear how the matching step is performed." Applicant respectfully traverses this rejection on the grounds that Applicant's specification clearly teaches that the matching is performed by the purchaser of cosmetics (see Applicant's specification, page 9, lines 13 - 15). The entire purpose of Applicant's claimed method is for selecting a suitable eye shadow and/or rouge. is where the matching step is found within the claim structure as originally filed. Next, at line 14 the Examiner asks, "Is there

a structural element that performs the matching or does a human determine the match?" First, this claim is a method claim which provides steps, not structure. The step of matching is determined in the selection of eye shadow and rouge colors in accordance with the maps and the race as claimed.

At page 3, paragraph number 6, the Examiner has noted at claim 1, lines 10 and 11 "the analysis result lacks proper antecedent basis". Applicant has changed "the" to "an".

At page 3, paragraph 7, the Examiner has noted that the preamble of claim 1 recites "selecting suitable eye shadow and rouge" yet there is no step within the body of the claim pertaining to selecting. As a result, Applicant has added to claim 1 an additional paragraph which reads selecting suitable eye shadow and/or rouge cosmetics based upon said color information. It is respectfully submitted that this step of selecting within the body of the claim overcomes the rejection.

The Examiner should note that the amendments in claim 1 are only for the purpose of overcoming rejections under 35 USC § 112(second paragraph) and are not related to prior art rejections.

### Claim Rejections - 35 USC 103

The Examiner has repeated previous rejections initially made on July 13, 2004 (not July 7, 2004 as stated at page 4 of this Office Action. In response, Applicant requests the Examiner to again reconsider Applicant's remarks made on January 7, 2005

which follow below (with correction of grammatical/spelling errors).

In the prior amendments to the claims, Applicant has made it clear that Applicant's invention is directed to surveys by race and obtaining an average face composition of a plurality of races. The enquiries are made by race, and the analysis is made by considering opinions and submitting the analysis as a data for color maps and images of the plurality of races. Still further, in claim 1, Applicant has stated that this is a method for selecting eye shadow and rouge. Eye shadow and rouge selection is disclosed throughout this specification. Applicant wishes the Examiner to note that the terms eye shadow and rouge relate to a term which in Japanese may be referred to as "point make up". This term refers to make up for a selective portion of the face. The term "point make up" has meaning very similar to the now claimed eye shadow and rouge. This was also explained in the Amendment filed October 20, 2003.

The basic concept of Utsugi '583 is very different from Applicant's claimed invention. '583 differs fundamentally from what Applicant's claims as the method for selecting eye shadow and rouge.

The '583 invention is directed to a specific individual and provides a method for cosmetic application which teaches how to apply cosmetics to that individual in order for this individual to obtain a face which the individual considers beautiful. On the other hand, in Applicant's claimed method, there is not a

targeting of a specific individual, but rather a targeting of Applicant's method is race specific. Applicant's method is for providing color information in order to choose what color of eye shadow and rouge would generally be suitable for a different person's skin and eye color based upon that person's race. A method for providing color information in order to choose what color of eye shadow and rouge would generally be suitable for Caucasian skin and eye color is claimed. Similarly, selection for Asian people and black people can be made based upon racial characteristics as determined by Applicant's color maps created by gathering information from different races of people by enquiry (survey). Information obtained as data is sorted by each race and each race's preference. The data obtained is used to decide color range of eye shadow and rouge as a "point make up" based upon a skin color and eye color of each race. Applicant's method is not based on selection by the individual as occurs in '583.

'583 instead is a different concept of the approach to cosmetic application. '583 is an <u>interaction between the subject person on whose face the cosmetics are to be applied</u>, and averages or preferred faces whose origin is not disclosed. '583 performs a morphing process where the average or "talent" type face (movie star, entertainer) is morphed with that of the subject in order to achieve a face which might be considered to be more desirable than the subject's own face (see bottom of column 3, line 65 through column 4, line 10).

Stated another way, '583 does not teach how to determine a desirable face based upon race and race inquiry. It asks the subject what the subject considers desirable. Applicant's claim 1 on the other hand, is directed to a method of obtaining desirable color maps which can indeed lead to the generation of such a desirable characteristic (color maps, color image maps, etc. which are considered desirable as a result of survey).

Initially, the Examiner should note that Applicant's now claimed invention is a method for selecting suitable eye shadow and rouge cosmetics which in the first sub paragraph requires a survey of average facial features of skin color, lip color and eye color of a plurality of races by a survey. Review of '583 shows that the word "survey" does not appear in this patent. Instead, '583 does not survey at all, and, instead, refers to "model faces" or "faces of preferred talents or actresses or actors, or 'beautiful faces' originated from the average theory" (see column 1, lines 66 through column 2, line 1). Throughout the '583 specification, there is reference to such averages, such as found at column 3, lines 10 - 13, column 3, lines 17 - 18, column 3, lines 44 - 47, and column 7, lines 10 - 17. However, in '583 there is no disclosure of were these averages faces come from and there is certainly no suggestion that the average face is a composition by a survey of average facial features of a plurality of races, including skin color, lip color and eye color of a plurality of people. The survey referred to by Applicant is such as that disclosed in Applicant's specification beginning at

page 5, line 15 through page 6, line 2 (points 1 - 17) and page 6, lines 8 - 25 (points 1 - 17).

Next, in Applicant's amended claim 1, it is required that there be performing of inquiries of a plurality of different races of people for the average face on which cosmetics are furnished. While, '583 refers to race, in column 8, lines 18 - 20, there is no discussion of a <u>survey</u> or inquiries among a <u>plurality of different races for the average</u> face on which various cosmetics are furnished and receipt of resulting opinions of these people (<u>races</u>). Instead, all that column 8 refers to is:

"A desirable face is selected from the model faces by using an average face for each race, each era, each personality, each work or the like or the name of a specific talent, or is selected from various model faces sequentially displayed on the screen of the monitor." (column 8, lines 18-22) (Emphasis added)

There is no teaching in column 8 or elsewhere in '583 that surveys are to be taken of individuals of a plurality of races to perform inquiries, especially inquiries of different races of people to determine the claimed opinions which are analyzed to obtain color and image maps as claimed (claim 1, last 5 lines).

Claim 1 requires analyzing the resulting opinions and submitting the analysis result as data for color maps and image maps. The claim to color maps based upon opinions of a plurality of races is totally lacking in '583. Initially, it is requested that the Examiner refer to Applicant's Figures 5 - 10 which show

such color maps. The color maps as taught by Applicant show acceptable ranges of tone and hue for rouge (5) for different races of people. Similarly, a different map is shown in Figure 6 for the different types of people and it relates to tone and hue. Figures 7, 8 and 9 still further show maps relating tone and hue to different colors of eyes and, therefore, different eye shadow considerations. Finally, Applicant's Figures 10 and 11 show yet further arrangements of color maps which consider features such as fresh, active, elegant and gentle as a function of Caucasian, Asian and black skin people. Still further, Figure 11 shows additional color maps which relate to eye shadow and eye color. Review of '583 shows no teaching whatsoever of creation of the claimed color maps. There are no such color maps in '583. Instead, all '583 shows is faces without any teaching or suggestion spectrum of color as a function of race (inquiries by race about an average face composition of a plurality of races) or other color features of the faces, such as eye color image (eye shadow and rouge selection). '583 cannot show such a map on a face because a face must have only one color at a time.

## <u>Claim 2</u>

'583 does not disclose any inquiries on a race by race basis. '583 simply does not recognize that different races may have different tastes or color preference. With respect to claim 2, the Examiner relies upon column 8, lines 8 - 22. However, the cited paragraph states:

". . .as model faces are used image data of faces of popular talents, actresses or actors or the like, or standard good-looking faces prepared in association with human races or the like, which are stored in the storage device (2)."

This is not a disclosure of a survey by race to obtain color maps.

## Claim 3

Initially, the Examiner should note that column 3, lines 1 - 64 discloses nothing like the color maps claimed and disclosed by Applicant. Instead, column 3 of '583 is a method where the make up instructor instructs a subject person on how to put make up, for example a desirable face may be determined by asking the subject person about preferences. This is an inquiry of the subject person, not color maps based upon inquiries in accordance with surveys of different eye colors of a plurality of people as set forth in claim 3. Column 3, line 56 refers to selection of colors of eye shadows. However, '583 does not in any way relate the different color to maps which are obtained in accordance with Applicant's method. Applicant would concede that individual selection of colors of eye shadows is known. This is done every day when a customer buys makeup. This is all that is disclosed in column 3 of '583.

In paragraph C, page 5 and page 6, the Examiner states that the remainder of claim 2 repeats the same limitations of claim 1. It is believed that the Examiner is referring to claim 3.

However, claim 3 is distinguished from claim 1 in that claim 1 refers only to color maps, while claim 3 is color relating to eye

color as shown in Applicant's Figures 7, 8 and 9 which relate eye shadow to eye color. The detail of Figures 7, 8 and 9 is simply not found in claim 1.

## Claim 4

Utsugi's horizontal and vertical axes shown in Figure 1 are part of a diagram for explaining one example of image processing in a facial image modifying method. These are coordinates of the face. On the other hand, claim 4 relates to an image map showing on a horizontal axis hues and tones along a longitudinal axis. This is found in Applicant's Figures 6, 7, 8 and 9. The Examiner should note that the relationship is between tone, hue and type of person. The maps Applicant claims and teaches have nothing to do with the shape of a person's face or a coordinate of a person's face on an x/y axis as shown in '583. The x/y axes and the coordinates shown in '583 Figure 1 are for changing or morphing from one image to another, and are not color maps as claimed which are prepared by analyzing results of opinions and submitting analysis results as color maps and image maps (claim In claim 4 Applicant states that the color maps comprise charts having horizontal axes and longitudinal axes showing hues and tones. This is not the axes of Figure 1 which are facial dimensions. Applicant respectfully traverses that the remainder of claim 4 repeats the limitations of claim 1. The terms "horizontal axis" and "longitudinal axis" are not found in claim 1.

## Claim 5

Here the Examiner argues that active-gentle or fresh-elegant (which are subjective opinions of the plurality of person surveyed) are disclosed in '583. Utsugi's hue and brightness, as pointed out above, do not relate to the subjective opinion data of the claimed survey in this claim. Utsugi, as pointed out above, is related to interaction between an instructor and a person putting on makeup, not the creation of color maps comprising charts having and horizontal axes expressing an image of "active and gentle" or longitudinal axes expressing an image of "fresh-elegant".

Still further, there is no suggestion in '585 of the limitations of claim 5. The Examiner argues that using charts to display changes in color is a technique typically used. However, the Examiner provides no teaching of the methods set forth in Applicant's claim. The Examiner's citation of Utsugi '583, column 9, lines 8 - 11 relates to color data for segmented areas acquired. This is based upon segmented areas of the face or area, and has nothing to do with color maps as set forth in claim 5. There is simply no suggestion of Applicant's claimed invention.

# Claim 6

The morphing program referred to in Utsugi (column 7, lines 1 - 55) is used in a different way than the morphing program of that of Applicant. Utsugi's morphing program in column 7 is

S/N: 09/666,184

related to morphing facial features from an original face (M) and shifted toward the corresponding points of the desirable face (T) by morphing program. On the other hand, Applicant's morphing as set forth is for morphing computer graphing methods (graphing is initially referred to in claim 1) as an average face composition by a survey of average facial features, skin color, lip color and eye color of a plurality of people. In Applicant's claims, it is not important, and Applicant does not claim morphing from one image to another. Instead, Applicant uses morphing for the average.

'583 describes the image processing of Figure 1 as follows:

"The image processing is executed by a program which employs an image processing scheme like morphing or twining. Specifically, the coordinate values of facial constituents, such as eyebrows, eyes, a nose and a mouth, of both an original face image M and a desirable face T, and the coordinate values of bright and dark patterns of each face are acquired as shown in Fig. 1, for example, and the original facial image M is mixed with and transformed toward the desirable face T based on those coordinate values." (column 7, lines 17-26)

This description of morphing or twining is the disclosure of '583. This description also shows that Figure 1 has nothing to do with image mapping. Figure 1 is a description of the morphing or twining and transformation toward the desirable face (T) based upon coordinate values.

The Examiner should also note that morphing is described again as a transformation from one face to another in column 7, lines 30 - 40. Therefore, although '583 and the instant

application use morphing technology, '583 does not use morphing technology as does Applicant. Applicant claims morphing technology as part of the graphing method wherein there is a survey used to obtain the graphing. In contrast, '583 uses morphing for change of features of one desirable feature or "talent" to match those desired by the subject person.

## Claims 7 and 8

These claims are directed to the "important points" and as pointed out above, this has nothing to do with coordinate values. In column 7, lines 15 -27 of '583, there is discussion of coordinate values of facial constituents and there positions. However, these values relate to the desirable face (T), not the creation of the average face, as set forth in both claims 7 and 8. The description of desirable face is at column 7, lines 10 - 16 where it is based upon models or average theory.

#### Response to Arguments

At page 4, the Examiner, beginning at line 6 up from the bottom, has quoted out of context Applicant's previously filed amendment at page 5, beginning at line 9, the words "color maps created by gathering information from different races of people by enquiry (survey)". Still further, the Examiner at page 4 beginning at line 4 up from the bottom has quoted language found in Applicant's previously filed amendment, page 6, beginning at line 3 which is "a method of obtaining desirable color maps which

can indeed lead to the generation of such a desirable characteristic (color maps, color image maps, etc. which are considered desirable as a result of a survey".

Applicant respectfully submits that mere quoting out of context two portions of Applicant's argument without considering Applicant's argument in total, and much less without considering Applicant's claims when considered as a whole is an incomplete response to Applicant's position taken in the previously filed remarks.

Still further, Applicant believes that claim 1 in fact claims color maps created by gathering information (see claim 1, line 11 which uses data resulting from opinions which are in turn obtained by performing enquiries among a plurality of different races (gathering information). The different races are recited at claim 1, line 7. Enquiry is recited at claim 1, line 7. Enquiry and survey is also known as having the same meaning in the English language. Next, in the portion relied upon by the Examiner, it states that information obtained as data is sorted by race and each race's preference. This is found in claim 1, lines 4 and 7. Therefore, Applicant respectfully submits that when the claim is read as a whole (as required by 35 USC § 103) that Applicant's explanation of the claim is proper and correctly describes Applicant's claim 1.

In the response to arguments beginning at line 4 up from the bottom, the Examiner has relied upon Applicant's previous remarks filed January 7, 2005, page 6, lines 3 - 7. It should be noted

that the Examiner has paraphrased Applicant's statement at lines 3 - 7. However, Applicant's method for selecting suitable eye shadow (claim 1, line 1), is clearly directed to the obtaining of color maps (claim 1, line 11) and color image maps (claim 1, line 11) which are considered desirable as a result of the survey. In claim 1, it this opinions recited in Lines 9 and 10 which are obtained by the survey recited in line 4, which when connected together and when the claim is read as a whole result in the explanation provided in Applicant's remarks, page 6, lines 3 - 7. It is, therefore, respectfully requested that the Examiner reconsider the remarks and their explanation of the claims in their entirety. The response to Applicant's arguments is, therefore, also respectfully traversed.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action in accordance thereof is requested. In the event there is any reason why the application cannot be allowed in this current

condition, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems by Interview or Examiner's Amendment.

Respectfully submitted,

Ronald R. Snider Reg. No. 24,962

Date: June 24, 2005

Snider & Associates Ronald R. Snider P.O. Box 27613 Washington, D.C. 20038-7613 (202) 347-2600

RRS/bam